

PATENT

REMARKS

Claims 1-31 are pending in this application. Claims 1, 10, 16, 17, 27 and 31 are independent claims. No claims are amended and no claims are canceled in the foregoing amendment. Reconsideration and allowance of the present application are respectfully requested.

Claim Rejections under 35 U.S.C. § 112

Claim 31 stands rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. This rejection is respectfully traversed.

The Examiner alleges that no function is specified by the word(s) preceding “means” in claim 31, and that it is therefore impossible to determine the equivalents of the elements, as required by 35 U.S.C. § 112, sixth paragraph.

Claim 31 recites “means for receiving a packet data transmission from a first wireless network; means for transmitting a pause command to the first wireless network; means for reconfiguring a receiver from a mode corresponding to communication with the first wireless network to a mode corresponding to communication with a second wireless network; means for monitoring a paging channel of the second wireless network; means for reconfiguring the receiver from the mode corresponding to communication with the second wireless network to the mode corresponding to communication with the first wireless network; and means for transmitting a resume command to the first wireless network.” Applicants submit that the recited receiving, reconfiguring, monitoring, and transmitting are functions in the sense of 35 U.S.C. § 112, sixth paragraph, and that all the requirements of 35 U.S.C. § 112, second paragraph, are satisfied. Specifically, 35 U.S.C. § 112, sixth paragraph, recites (with emphasis added)

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

PATENT

Accordingly, the scope of each of the functions described is “the corresponding structure, material, or acts described in the specification and equivalents thereof.” Clearly, the claims are defined with specificity by operation of law, as noted above. Therefore, Applicants respectfully request that the rejection of claim 31 under 35 U.S.C. § 112, second paragraph, be withdrawn.

Claim Rejections under 35 U.S.C. § 103(a) - Vanghi

Claims 1-3, 5, 6, 8-24, and 26-31 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 6,937,861 to Vanghi (hereinafter “Vanghi”). Applicants respectfully traverse this rejection, as detailed below.

MPEP 706.02(j) sets forth the standard for a Section 103(a) rejection:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Additionally, the recently published “Examination Guidelines for Determining Obviousness Under 35 U.S.C. 103 in View of the Supreme Court Decision in *KSR International Co. v. Teleflex Inc.*”, (hereinafter “KSR Guidelines”) further supports the basic requirement for a finding of obviousness as clearly articulated in the following.

To reject a claim based on this rationale, Office personnel must resolve the Graham factual inquiries. Office personnel must then articulate the following:

- (1) a finding that the prior art included each element claimed, although not necessarily in a single prior art reference, with the only difference between the claimed invention and the prior art being the lack of actual combination of the elements in a single prior art reference;
- (2) a finding that one of ordinary skill in the art could have combined the elements as claimed by known methods, and that in combination, each element merely would have performed the same function as it did separately;

PATENT

(3) a finding that one of ordinary skill in the art would have recognized that the results of the combination were predictable; and

(4) whatever additional findings based on the Graham factual inquiries may be necessary, in view of the facts of the case under consideration, to explain a conclusion of obviousness.

The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded nothing more than predictable results to one of ordinary skill in the art at the time of the invention. "[I]t can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does." If any of these findings cannot be made, then this rationale cannot be used to support a conclusion that the claim would have been obvious to one of ordinary skill in the art.

The 35 U.S.C. § 103(a) obviousness rejections of claims 1-3, 5, 6, 8-24, and 26-31 are improper because the elements for a *prima facie* case of obviousness are not met.

i) *The References do not Teach or Suggest All the Features of the Claimed Invention*

The rejection fails to meet the criterion that the prior art must teach or suggest all the claims' limitations or as stated in the KSR Guidelines "a finding that the prior art included each element claimed". Each of Applicants' independent claims 1, 10, 16, 17, 27 and 31 recite, in part, features such as "*transmitting a pause command to the first wireless network.*" Applicants respectfully assert that Vanghi fails to teach or suggest at least this feature of independent claims 1, 16, 17, 24 and 31.

Generally, Vanghi describes an access terminal communicating with a data network, where the access terminal unannouncingly ignores the data network while going to service a voice network (see Vanghi, col. 5, lines 31-54). Then, when Vanghi returns from servicing the voice network, Vanghi determines (via monitoring its "time of suspension") if the data network has dropped the connection thereby requiring the Vanghi access terminal to request a new connection with the data network (see Vanghi, col. 8, lines 21-34). If the "time of suspension" has not expired, then the access terminal continues communicating with the data network,

PATENT

otherwise, the data network would have terminated the connection with the access terminal requiring the access terminal to request a new connection (see Vanghi, col. 8, lines 41-50). As such, Applicants agree with the Examiner's prior statements that Vanghi does not explicitly disclose transmitting a pause command to the first wireless network (see page 3 of the Office Action dated December 6, 2006, and page 3 of the Office Action dated June 30, 2006).

In addition, Vanghi is silent regarding any data flow messaging from the access terminal to the data network, either prior to the access terminal ignoring the data network or after returning back to the ignored data network after servicing the voice network.

The Examiner alleges that "since control information is continuously transmitted to the radio network 22 as the access terminal 14 starts to suspend its communication with the radio network 22, therefore, it would have been obvious that as the access terminal 14 transmits in the control information a pause command before it suspends communication with the radio network 22." The Examiner's position is purely speculative and essentially hindsight as there are no teachings in Vanghi to suggest that the control information includes a pause command equivalent to that recited in the independent claims, much less that such a pause command may actually be transmitted by access terminal 14 to radio network 22 just prior to suspension of communication. Vanghi discloses only that access terminal 14 suspends communication with radio network 22, and that radio network 22 detects a loss of signal. No mechanism for suspending communication with the radio network 22 is given in Vanghi.

Furthermore, it is clear from a review of the entirety of Vanghi that access terminal 14 simply stops communicating with radio network 22 without sending an explicit control signal indicating that it wishes to temporarily suspend communications. Vanghi states that "When the access terminal 14 suspends communication with the IS-856 radio network 22, the IS-856 radio network 22 will detect a loss of the signal on the reverse link traffic channel and initiate a fade timer to time the duration of the inactivity." (see Vanghi, col. 5, lines 59-63). The fade timer is initiated because radio network 22 thinks there may be a fade failure with its connection to access terminal 14.

PATENT

Vanghi continues to discuss how fade timers used by radio network 22 may be tracked by access terminal 14 to determine whether the access terminal should resume communication using the suspended connection, or whether it should request a new connection with radio network 22 (see Vanghi, col. 2, line 60 through col. 3, line 5). This determination allows access terminal 14 to not impinge upon connections with other access terminals that may have been reallocated the resources previously allocated to access terminal 14 during the suspended communication period. If Vanghi were to transmit a pause command before suspending communication with radio network 22 as proposed by the Examiner, there would be no need to initiate a fade timer by radio network 22 because it would know that a fade failure has not occurred. Thus, there is no need to send a pause command in the context of the invention of Vanghi, which instead tracks a radio network fade timer.

Therefore, Vanghi fails to teach or suggest at least *"transmit[ting] [a] pause command to the first wireless network"* as recited in independent claims 1, 10, 16, 17, 27 and 31.

ii) There is not Sufficient Suggestion or Motivation to Modify the References

Secondly, the rejection fails to meet the *prima facie* obviousness criterion that there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference.

As described above, the principle of operation of the connection management invention disclosed in Vanghi is to control access to network resources based on whether access terminal 14 has or has not exceeded the maximum allowed period of activity as determined by the fade timer. If no fade timer is initiated, as would presumably be the case under the proposed modification, access terminal 14 would not be able to track the fade timer, and the fade timer tracking techniques of the invention described in Vanghi would be rendered unsatisfactory for their intended purpose. It is a well known tenet of U.S. patent law that if a proposed modification would render the reference's invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. See In re Gordon, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984), *see also* MPEP § 2143.01.

PATENT

Moreover, if the fade timer tracking techniques underlying the principle of operation of Vanghi were ignored, and instead, a pause/resume command signal principle of operation employed as proposed by the Examiner, the proposed modification would change the principle of operation of Vanghi. It is also a well known tenet of U.S. patent law that if the proposed modification of a reference would change the principle of operation of the reference's invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. See In re Ratti, 270 F.2d 810, 123 USPQ 349 (CCPA 1959), see also MPEP § 2143.01. See also, the KSR Guidelines, referenced above, requiring that "each element merely would have performed the same function as it did separately."

Accordingly, Vanghi cannot render obvious, under 35 U.S.C. §103, Applicants' invention as presently claimed in independent claims 1, 10, 16, 17, 27 and 31. The nonobviousness of independent claims 1, 10, 16, 17, 27 and 31 also precludes the rejections of claims 2, 3, 5, 6, 8, 9, 11-15, 18-24, 26, and 28-30, which variously depend therefrom, because a dependent claim may not be rejected as obvious if the independent claim from which it depends is nonobvious. See In re Fine, 5 USPQ.2d 1596, 1600 (Fed. Cir. 1988), see also MPEP § 2143.03.

Therefore, the Applicants request that the Examiner withdraw the 35 U.S.C. § 103(a) obviousness rejections to claims 1-3, 5, 6, 8-24, and 26-31.

Claim Rejections under 35 U.S.C. § 103(a) – Vanghi in view of Rajaniemi

Claims 4, 7 and 25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Vanghi in view of U.S. Patent 6,487,399 to Rajaniemi et. al (hereinafter "Rajaniemi"). Applicants respectfully traverse this rejection, as detailed below.

Rajaniemi fails to cure the deficiencies of Vanghi discussed above with regard to independent claims 1 and 17. Thus, Applicants submit that the nonobviousness of independent claims 1 and 17 precludes a rejection of claims 4, 7, and 25 depending therefrom, because a dependent claim may not be rejected as obvious if the independent claim from which it depends is nonobvious. See In re Fine, 5, USPQ.2d 1596, 1600 (Fed Cir. 1988), see also MPEP § 2143.03.

PATENT

Therefore, the Applicant requests that the Examiner withdraw the 35 U.S.C. § 103(a) obviousness rejections to dependent claims 4, 7, and 25.

REQUEST FOR ALLOWANCE

In view of the foregoing, Applicant submits that all pending claims in the application are patentable. Accordingly, reconsideration and allowance of this application are earnestly solicited. Should any issues remain unresolved, the Examiner is encouraged to telephone the undersigned at the number provided below.

Respectfully submitted,

Dated: November 7, 2007

By: /Kam T. Tam/
Kam T. Tam
Reg. No. 35,756

QUALCOMM Incorporated
5775 Morehouse Drive
San Diego, California 92121
Telephone: (858) 658-5102
Facsimile: (858) 658-2502